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# FINDING OF NO SIGNIFICANT IMPACT

## TENNESSEE VALLEY AUTHORITY

## EAST BOWLING GREEN-SOUTH SCOTTSVILLE 161-KV TRANSMISSION LINE TAP TO NORTH MILL SUBSTATION WARREN COUNTY, KENTUCKY

The Tennessee Valley Authority (TVA) proposes to construct and operate a 161-kV transmission line from its East Bowling Green-South Scottsville 161-kV Transmission Line to the new North Mill Substation being built by Bowling Green Municipal Utilities (BGMU). The transmission line would be 6 miles long and occupy about 55 acres; about half of it would be built on transmission line right-of-way occupied by an existing Warren Rural Electric Cooperative Corporation (WRECC) transmission line. TVA would remove the WRECC line and rebuild it as a second circuit on the new line. An Environmental Assessment (EA) was prepared for this proposed action and is incorporated by reference.

The proposed transmission line and BGMU substation would provide a third TVA delivery point for serving the BGMU system and alleviate capacity and reliability problems caused by the recent and anticipated future growth in electrical demand in Bowling Green. TVA analyzed several potential routes for the proposed line from the East Bowling Green-South Scottsville 161-kV line. The proposed route was selected based on a combination of factors including public input and minimization of adverse engineering, environmental, and land use effects. TVA also considered a transmission line connection from TVA's Memphis Junction-Portland 161-kV line. This alternative was eliminated from detailed consideration due to a variety of practical and engineering reasons. In addition to the proposed route, the EA also analyzed the No Action Alternative. Under this alternative, TVA would not build the proposed transmission line. BGMU would still have to take measures to resolve the capacity and reliability problems and could do this by completing its substation and building a connecting transmission line itself. This line would likely be at least as long as the proposed TVA transmission line and therefore the impacts of the No Action Alternative could be similar to or greater than those of the proposed action.

The proposed transmission line was developed with extensive public involvement. TVA held two open house meetings with potentially affected landowners and used information gathered during these meetings and associated public comment periods to evaluate and refine potential transmission line routes. TVA also released a draft of the EA for public review. Comments received during the 30-day comment period have been addressed in the final EA.

The EA concludes that impacts to wildlife and vegetation would be minor and insignificant. Most of the proposed transmission line route is already cleared and less than two acres of forest would be affected by construction. The right-of-way clearing could affect potential roost habitat for the endangered Indiana bat. To avoid impacting this federally listed species, TVA would implement measures described in the Mitigation section below. No other federally listed species would be affected, and the U.S. Fish and Wildlife Service (USFWS) has concurred with TVA's determination that there would be no effects to federally endangered or threatened species.

Only four streams would be crossed by the proposed transmission line. The crossing of the largest stream, Drakes Creek, would be on existing transmission line right-of-way. With implementation of routine best management practices during construction and maintenance

activities, impacts to aquatic life, as well as to surface water quality would be insignificant. Potential effects to groundwater quality would also be insignificant.

About a mile of the proposed transmission would be in the floodplain of Drakes Creek. The location of transmission structures in the floodplain is not expected to increase the flood hazard and the proposed action is consistent with Executive Order 11988 on floodplain management. About 0.15 acres of wetlands occur within the proposed right-of-way and impacts to these wetlands would be minor and insignificant.

One historic structure eligible for listing in the National Register of Historic Places (NRHP) and two archaeological sites occur within the project's area of potential effects. Because the view from the historic structure to the proposed line is screens, no adverse effects on the structure are expected. Based on the results of test excavations of the archaeological sites and with implementation of the mitigation measure described below, these sites would not be adversely affected. In letters dated October 27, 2006, and November 14, 2006, the State Historic Preservation Officer concurred with these determinations.

Impacts to recreation activities, managed areas, and visual aesthetics would be insignificant. No parks or ecologically significant sites would be affected. Some short-term effects on property value and real estate marketability could occur, especially to those properties located very near the proposed route. Such effects vary and are not readily predictable. Based on the results of studies elsewhere, any initial decrease in real estate values of residential properties close to the transmission line would likely be attenuated within about five years. Thus, no long-term effects to local property values are anticipated. No disproportionate effects to any minority populations or disadvantaged groups are expected.

At its closest point, the line would be located about 412 feet from the Anchored Christian School. The calculated magnetic field strength at 400 feet from the centerline of the transmission line is 0.35 milligauss. The line would also come within about 700 feet of the Cumberland Trace Elementary School. This level of anticipated exposure is a minor and insignificant contribution to the overall level of daily magnetic field exposure to children at the schools.

**Mitigation**

The siting process TVA uses for routing proposed transmission lines is structured to avoid and reduce potential environmental impacts. That process was used here and is explained more fully in the EA. In addition to this siting process, TVA would apply standard measures to reduce impacts during construction and maintenance activities including best management practices and other measures listed in appendices of the EA. TVA would also implement the following measures to further reduce the potential for impacts to cultural resources and endangered species:

- To protect archaeological sites 15WA156 and 15WA157, all work would be conducted in dry conditions or using low ground pressure equipment or mats to prevent rutting.

- The removal of any potential Indiana bat roost trees would occur between October 15 and March 31. If TVA needs to clear the right-of-way outside of this period, TVA would hire a third party with appropriate qualifications to perform a summer mist-net survey for Indiana bats in forested sections of the right-of-way route. This survey would be performed between May 15 and August 15 using U.S. Fish and Wildlife Service

guidelines. If no Indiana bats are encountered, the USFWS would not object to clearing trees along the proposed route outside of the October 15 and March 31 period.

**Conclusion and Findings**

Based on the findings listed above and the analyses in the associated EA, we conclude that the construction and operation of the proposed transmission line would not be a major federal action significantly affecting the environment. Accordingly, preparation of an environmental impact statement is not required. This Finding of No Significant Impact is contingent upon adherence to the identified mitigation measures.

*Original signed by* — *December 20, 2006*

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Date Signed